



Advanced UV Water System

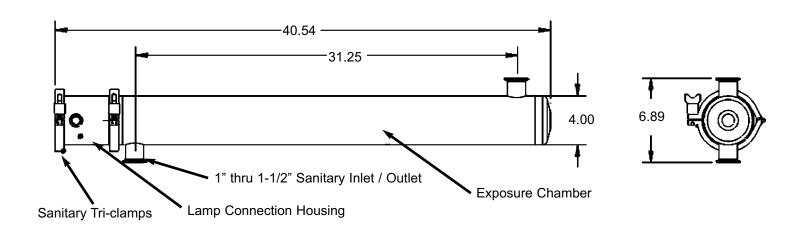
RGF's Germicidal UV Water System for microbrial control



- · Continuously kills microbes in fluids during processing
- All stainless steel construction
- All plumbing sanitary orbital welds
- Easy maintenance, cleaning and CIP functionality
- Small footprint
- Ideal for lower flow applications
- All electronics and accessories in NEMA 4X enclosures
- Ideal treatment for fluids with high opacity
- A commercial grade germicidal UV water purification system manufactured in the USA of stainless steel with sanitary tri-clamp connections.
- RGF's proprietary PPC coating and guartz sleeve system offers both safety and low maintenance. Utilizing the advanced non-polar charge of the PPC, contaminant's contained in the water are no longer attracted to the lamp jacket as commonly occurs in typical quartz only jacketed systems. This non-polar feature significantly reduces the common problem of calcium deposits forming on the lamp jacket water interface, which results in significant reductions in unit performance. By preventing the deposition or fouling, performance is maintained over a longer period. The PPC coating has the added benefit of also acting as a secondary containment layer to the fluid stream, significantly eliminating the risk of glass or toxic exposure if the unit is inadvertently damaged during operation. Each unit utilizes high output (HO) germicidal UV long life lamps.
- Small size, easy installation, low maintenance (annual cell replacement only).
- 1 year warranty

The RGF FLUV Water System is a purification process designed to treat brine injection fluid and other liquids with germicidal UltraViolet (UV) light. This is not a filter. It will not remove particulate, heavy metals or hardness from the water. Other RGF filters should be used in conjunction with this system for these purposes.

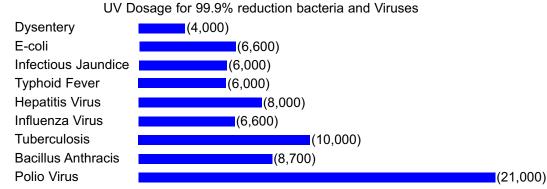
Germicidal UV Water System



SPECIFICATIONS: Model FLUV-20

| Fluid Flow | 20 GPM | *Higher flow rates |
|-------------------------|--------------------------------|---------------------|
| Emitter(s) | 5 - Low Pressure | available by |
| UV Range | 185-400 nM | installing multiple |
| Overall dimensions | 41" L x 7" overall diameter | units in parallel |
| Weight | 45 lbs (dry) | P. C. |
| Electrical requirements | 115/230 VAC, 60 HZ, 1 phase,8A | |
| Plumbing Connections | 1-1/2 Sanitary | |
| Operating Volume | 0.838 gallons | |

UV LIGHT WATER TREATMENT



Microwatts - secs/CM² UV - Energy in Microwatts - Seconds per Square Centimeter

RGF Environmental Group, Inc.





Advanced UV Water System

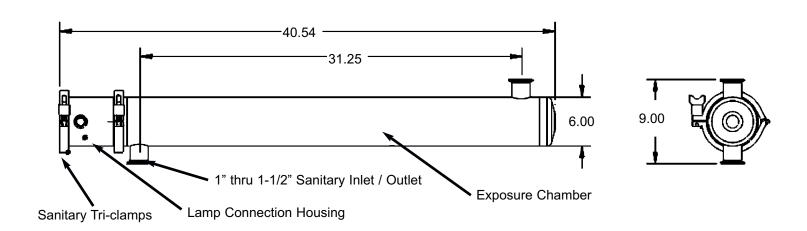
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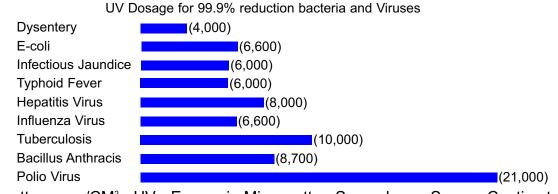
Germicidal UV Water System



SPECIFICATIONS: Model FLUV-60

| Fluid Flow | 60 GPM | *Higher flow rates |
|-------------------------|--------------------------------|---------------------|
| Emitter(s) | 5 - Low Pressure | available by |
| UV Range | 185-400 nM | installing multiple |
| Overall dimensions | 41" L x 9" overall diameter | units in parallel |
| Weight | 90 lbs (dry) | |
| Electrical requirements | 115/230 VAC, 60 HZ, 1 phase,8A | |
| Plumbing Connections | 1-1/2 Sanitary | |

UV LIGHT WATER TREATMENT



Microwatts - secs/CM² UV - Energy in Microwatts - Seconds per Square Centimeter

RGF Environmental Group, Inc.





High Volume Ultraviolet Fluid Sterilizer

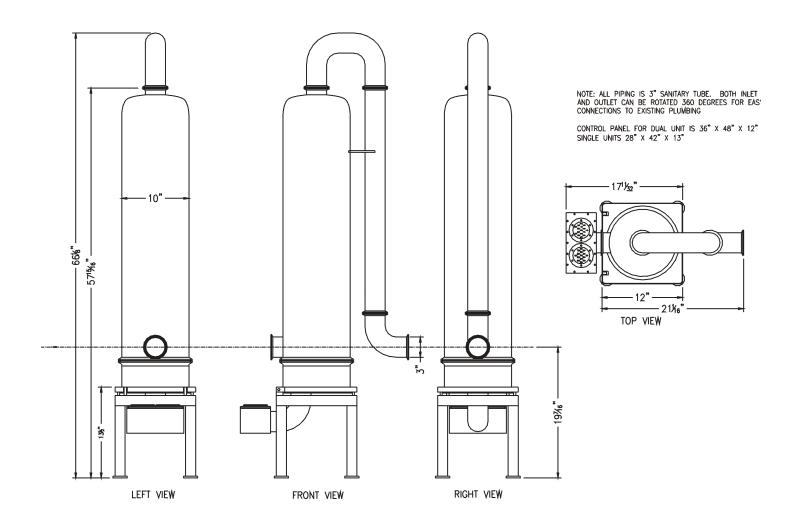


- Continuously kills microbes in fluids during processing
- High volume flow rate ideal for brine chill water
- •CIP compatible
- Visual inspection of all internals accomplished in minutes
- Multiple unit configurations available for higher flow streams
- Small unit foot print with remote electronic enclosure to optimize production space
- Omni directional inlet and outlet connections
- Stainless steel construction using industry standard Tri-Clover sanitary fittings
- Standard lamp status display panel
- Standard leak detector circuitry
- Standard pump alarm control relay
- •Standard NEMA 4X electrical enclosure

RGF has developed a specialized fluid treatment system for the food processing industry. The unique design of this system incorporates precision machining to optimize fluid flow characteristics as well as ultraviolet light transmittance into the fluid space. The vertical reactor design allows for continuous operation at pressures as high as 50 PSI while providing the smallest possible footprint. A single pass through this unit results in a UV exposure in excess of 40 mJ/cm2. The entire outer shell assembly of the unit can be removed in minutes by simply removing the Tri-Clover style clamps and lifting the shell off the unit base. With the outer shell removed, the interior of the unit is accessible for visual inspection. This simple design facilitates routine inspections to ensure proper CIP procedures are being followed in critical operating environments.

This system is easily incorporated into existing chiller loops with the unit inlet and outlet connections being located on the outer tube assembly. This allows the connections to be rotated 360 degrees to accommodate existing plant system components. This unique feature also makes it possible to easily accommodate multiple units in parallel configurations for higher flow rate applications.

All systems come standard with: stainless steel construction, optical display panels for lamp status, an electronic leak detector with alarm contact and visual indicator light, FDA approved high impact polymer which encase the emitters to prevent breakage and fluid contamination, NEMA 4X enclosures and factory installed flexible interconnects.



SPECIFICATIONS: Model FLUV-200

| Fluid Flow | 200 GPM (per unit) | *Higher flow rates |
|-------------------------|---------------------------------|---------------------|
| Emitter(s) | 31 - Low Pressure | available by |
| UV Range | 185-400 nM | installing multiple |
| Overall dimensions | 58" L x 10" overall diameter | units in parallel |
| Weight | 375 lbs (dry) | |
| Electrical requirements | 115/230 VAC, 60 HZ, 1 phase 30A | |
| Plumbing Connections | 3" Sanitary (Tri clover style) | |
| | | |

RGF Environmental Group, Inc.